

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 257-Q-11-PCT	<b>FOR FURTHER ACTION</b>	
	See item 4 below	
International application No. PCT/IL2007/001405	International filing date ( <i>day/month/year</i> ) 13 November 2007 (13.11.2007)	Priority date ( <i>day/month/year</i> ) 13 November 2006 (13.11.2006)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant Q-CORE LTD.		

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
<p>3. This report contains indications relating to the following items:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="width: 15%; text-align: center; padding: 5px;">Box No. I</td> <td style="width: 70%; text-align: left; padding: 5px;">Basis of the report</td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Box No. II</td> <td style="text-align: left; padding: 5px;">Priority</td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Box No. III</td> <td style="text-align: left; padding: 5px;">Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Box No. IV</td> <td style="text-align: left; padding: 5px;">Lack of unity of invention</td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Box No. V</td> <td style="text-align: left; padding: 5px;">Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Box No. VI</td> <td style="text-align: left; padding: 5px;">Certain documents cited</td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Box No. VII</td> <td style="text-align: left; padding: 5px;">Certain defects in the international application</td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Box No. VIII</td> <td style="text-align: left; padding: 5px;">Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application																						
<p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>																								

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report 19 May 2009 (19.05.2009)</p> <p>Authorized officer  Simin Baharlou e-mail: pt09.pct@wipo.int</p>
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## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
EYAL BRESSLER  
DR EYAL BRESSLER LTD  
LAZROM HOUSE 11 TUVAL ST.  
RAMAT GAN, ISRAEL 52522

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

21 JUL 2008

Applicant's or agent's file reference 257-Q-11-PCT		FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/IL07/01405	International filing date (day/month/year) 13 November 2007 (13.11.2007)	Priority date (day/month/year) 13 November 2006 (13.11.2006)	
International Patent Classification (IPC) or both national classification and IPC: IPC: F04B 43/12( 2006.01),F04B 45/08( 2006.01) USPC: 417/441,474,477.11,477.2,477.9,480			
Applicant Q-CORE LTD.			

## 1. This opinion contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the opinion
<input type="checkbox"/>	Box No. II	Priority
<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

## 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion 16 July 2008 (16.07.2008)	Authorized officer Devon C Kramer Telephone No. (571) 272-3700
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Form PCT/ISA/237 (cover sheet) (April 2007)

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IL07/01405

## Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:
  - the international application in the language in which it was filed
  - a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.  This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of:
  - a. type of material
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material
    - on paper
    - in electronic form
  - c. time of filing/furnishing
    - contained in the international application as filed.
    - filed together with the international application in electronic form.
    - furnished subsequently to this Authority for the purposes of search.
4.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

## 5. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IL07/01405

## Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

the entire international application  
 claims Nos. 4 and 5

because:

the said international application, or the said claim Nos. \_\_\_\_\_ relate to the following subject matter which does not require an international search (*specify*):

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 4 and 5 are so unclear that no meaningful opinion could be formed (*specify*):

Claims 4-5 are improper multiple dependent claims under PCT Rule 6.4(a).

the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):

no international search report has been established for said claims Nos. \_\_\_\_\_

a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.  
 furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.  
 pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rules 13ter.1(a) or (b).

a meaningful opinion could not be formed without the tables related to the sequence listings; the applicant did not, within the prescribed time limit, furnish such tables in electronic form complying with the technical requirements provided for in Annex C-bis of the Administrative Instructions, and such tables were not available to the International Searching Authority in a form and manner acceptable to it.

the tables related to the nucleotide and/or amino acid sequence listing, if in electronic form only; do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

See Supplemental Box for further details.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITYInternational application No.  
PCT/IL07/01405

## Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims <u>NONE</u>	YES
	Claims <u>1-3, 6</u>	NO
Inventive step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-3, 6</u>	NO
Industrial applicability (IA)	Claims <u>1-3, 6</u>	YES
	Claims <u>NONE</u>	NO

## 2. Citations and explanations:

Claims 1-3 and 6 lack novelty under PCT Article 33(2) as being anticipated by Haber et al US 5,257,978.

In regards to claims 1 and 6, Haber et al. discloses: a anti-free flow mechanism (2) for a peristaltic pump (5) comprising a passive mechanical interface (6) which integrally accommodates a portion of flexible infusion tube (4); an anti-free flow valve (see abstract) including a spring activated latch (10, 42) incorporated within the passive mechanical interface (6) (see Fig. 2A); wherein said latch, having maneuverable characteristics, is secured in the passive mechanical interface (6) in either a closed (see Fig. 2A) or an open (see Fig. 2B) configurations. The closed configuration provides no flow whereas the opened configuration allows for free flow facilitation. Haber et al. discloses further that when the passive mechanical interface (6) is not engaged in a peristaltic pump (5), as seen in Fig. 2A, the anti-free flow valve is automatically actuated via a plurality, one or more springs (10), to its closed configuration therefore restricting flow. However, when the passive mechanical interface (6) is situated in such a manner whereby it is engaged by the peristaltic pump (5) via element (80), as seen in Fig. 2B, the latch is automatically switched into an open configuration unrestriciting the flexible infusion tube (5) and thus allowing for flow (see column 3 line 35 – column 4 line 27).

In regards to claim 2-3 and 6, Haber et al. discloses that the anti-free flow valve is adapted to be manually switched to a temporally open configuration when the passive mechanical interface (6) is not engaged by the peristaltic pump (5) (see column 4, lines 1-2 and Fig. 2A). It can be seen in Fig. 2A that by providing "a continuous press" on portion (42) of the anti-free flow valve a "temporally open" configuration can be achieved. Upon removal of the "continuous press", spring (10) allows for the anti-free flow valve to be biased in direction (62) and into the "close" configuration as described by the applicant (see Fig. 2A). Haber et al. discloses further, anti-free flow valve is adapted to be switched into a self maintained "secured-open" configuration (see column 4, lines 11-27 and Fig. 2C), wherein the "secured-open" configuration is possibly re-switched to the "temporally-open" configuration by applying an inverted titling press. Fig. 2A according to Haber et al. discloses that the anti-free flow valve is adapted to be automatically switched into its closed configuration whereat the passive mechanical interface (6) is switched-out of the peristaltic pump, and thus out of an engaging force applied by the pump (5) onto the anti-free flow valve, the spring activated latch is biased by spring (10) therefore restricting the flexible infusion tube (4) into a "close" configuration (see column 3 line 63 – column 4 line 1 and Fig. 2A- 2B).

Claims 1-3 and 6 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/IL07/01405

**Box No. VII Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

The description is objected to as containing the following defect(s) under PCT Rule 66.2(a)(iii) in the form or contents thereof: The word "sad" on page 5, line 1 is a misspelling. The abbreviation "AFFM" is stated towards the bottom of page 2. No explicit definition is provided for such term. On page 5, "flexible infusion tube" is designated by "(2)" in error. On page 5, "sachems" is a misspelling. Starting on page 5 "MS", "infusion tube" and "AFFV" are referenced by indicators "(10)", "(11)" and "(12)" respectively, where as they are previously referred to by different indicators. Throughout the description the word "configures" is used incorrectly.

Claim 3 is objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: Claim 3, line 4 states "an self maintained" in error. Throughout the claims the word "configures" is used incorrectly.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/IL07/01405

**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the questions whether the claims are fully supported by the description, are made:

Claims 1-2 and 6 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because the claims are indefinite for the following reason(s): Claim 1 lines 3 and 5 recite the limitations "the flexible infusion tube" and "said maneuverable latch" respectively. Claim 2 line 3 recites "said configuration switch" and claim 6 line 15 recites "said switch". There is insufficient antecedent basis for these limitations within the claims.